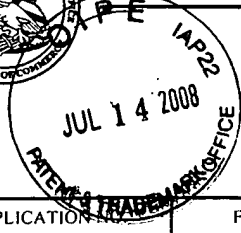




UNITED STATES PATENT AND TRADEMARK OFFICE

AF/ IFW

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov



APPLICATION	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-------------	-------------	----------------------	---------------------	------------------

10/531,835

10/12/2005

Bernard John Cooper

70403-0021

3756

7590
07/03/2008
McGarry Bair
171 Monroe Avenue N W
Suite 600
Grand Rapids, MI 49503

EXAMINER

ZHU, WEIPING

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

07/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/531,835	COOPER ET AL.	
	Examiner	Art Unit	
	WEIPING ZHU	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-10 is/are pending in the application.
- 4a) Of the above claim(s) 8-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 1 and 3-7 are currently under examination, wherein claims 1, 3, 5 and 6 have been amended in applicant's amendment filed on May 20, 2008. The original claim 2 has been cancelled by the applicant in the same reply. The non-elected claims 8-10 have been withdrawn, wherein claims 8 and 9 have been amended in the same reply.

Applicant's election with traverse of Invention I, Claims 1-7 in the reply filed on May 20, 2008 is acknowledged. The traverse is on the ground(s) that Snodgrass et al. (US 4,444,740) does not disclose a method substantially identical to the method of the instant claim 1. This is not found persuasive. As stated in the Office action dated February 21, 2008, Snodgrass et al. ('740) discloses a method of treating a spent potliner (abstract), which is substantially identical to the claimed method of treating the spent potliner in the process steps as claimed. The intended use of the residual of Snodgrass et al. ('740) does not have to be the same as that of the instant invention.

The requirement is still deemed proper and is therefore made FINAL.

Status of Previous Rejections

2. The previous rejections of claims 1 and 3-7 under 35 U.S.C. 103(a) as being unpatentable over Gamson et al. (US 4,355,017) in view of Snodgrass et al. (US 4,444,740) as stated in the Office action dated February 21, 2008 have been maintained.

Claim Rejections - 35 USC § 103

Art Unit: 1793

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gamson et al. ('017) in view of Snodgrass et al. ('740) as stated in the Office action dated February 21, 2008.

With respect to the amended features of claim 1, the function of mixing the heated spent potliner with water in the process of Gamson et al. ('017) is inherently the same as the function of mixing the heated spent potliner in the claimed method of the instant invention. Snodgrass et al. ('740) discloses blending the treated ash residue with other chemicals and minerals to provide useful mineral products (col. 2, lines 35-58 and Figure 1).

With respect to the amended features of claims 2, 5 and 6, they do not change the scopes of the claims. Therefore, the reasons for the rejections as stated in the Office action dated February 21, 2008 are applied properly herein.

Response to Arguments

4. The applicant's arguments filed on May 20, 2008 have been fully considered but they are not persuasive.

First, the applicant argues that instead and unlike the cited references, the instant invention keeps the important constituents such as fluorine and carbon in the residual. In response, the examiner notes that as stated in the Office action dated

Art Unit: 1793

February 21, 2008, the method of treating a spent potliner after use in an aluminum smelting process of Gamson et al. ('017) in view of Snodgrass et al. ('740) meets all the claim limitations of the method of the instant invention as claimed. Therefore, the remaining contents of fluorine and carbon in the residual of Gamson et al. ('017) in view of Snodgrass et al. ('740) would be substantially identical to those of the instant invention.

Second, the applicant argues that nowhere does Snodgrass et al. ('740) teach or suggest blending the cured residual with other chemicals and minerals to provide useful mineral products as required in the instant Claim 1. In response, the examiner notes Snodgrass et al. ('740) discloses blending the water-treated ash residue with other chemicals and minerals (e.g. diluted sulfuric acid and lime) to provide mineral products (e.g. calcium fluoride) (col. 2, lines 35-58 and Figure 1), which reads on the claim limitations. It would have been obvious to one of ordinary skill in the art that the product of Gamson et al. ('017) in view of Snodgrass et al. ('740) is a useful product which can be used at least as landfill.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 1793

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy King/

Application/Control Number: 10/531,835
Art Unit: 1793

Page 6

Supervisory Patent Examiner, Art
Unit 1793

WZ

6/24/2008

TC1700 REMSEN

Organization Bldg./Room
UNITED STATES PATENT AND TRADEMARK OFFICE

P.O. Box 1450

Alexandria, VA. 22313-1450

If Undeliverable Return In Ten Days

Official Business

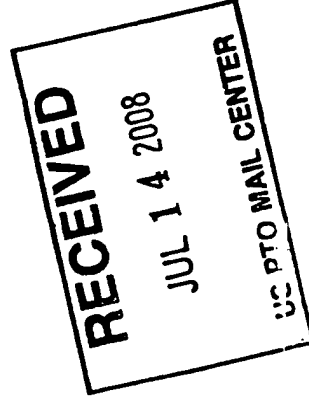
Penalty For Private Use, \$300



AN EQUAL OPPORTUNITY EMPLOYER



02 1M \$ 00.590
0004244975 JUL 03 2008
MAILED FROM ZIP CODE 22314



FORWARD TIME EXC
ENCLOSURE
322 MARKET AVE SW STE 500
GRAND RAPIDS MI 49503-4065

RETURN TO SENDER

49503065204 0015
2231301450